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George H. Lee

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EXAMINER

SHERR, CRISTINA O

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/997,640	Applicant(s) LEE, GEORGE H.	
	Examiner CRISTINA OWEN SHERR	Art Unit 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/25/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) 11-14, 16, 22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10, 15, 17-19, 21 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed February 25, 2008. Claim 1 has been canceled. Claims 2, 21, and 24 have been amended. Claims 2-19 and 21-24 are pending in this case. Claims 2-10, 15, 17-19, 21, and 24 are under examination.

Response to Arguments

2. Applicant's arguments, see Amendment, filed February 25, 2008, with respect to the section 101 rejection of claims 2-10, and given the current amended form of claim 2, have been fully considered but they are not persuasive. Claim 2 has been amended to recite, in part "wherein said determining steps and said calculating step are performed by a computer."

3. We note that the cited limitation is almost an afterthought, and merely a nominal or ancillary recitation of technology. Thus, it is analogous to a preamble which would only state a purpose or intended use for the invention and where the claim is otherwise structurally complete. (*e.g.*, *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 51 USPQ2d 1161 (Fed. Cir. 1999), *Catalina Marketing International Inc. v. Coolsavings.com Inc.*, 62 USPQ2d 1781 (Fed. Cir. 2002))

4. Applicant's arguments filed February 25, 2008 with respect to the section 103 rejections of the claims have been fully considered but they are not persuasive.

5. Applicant argues, regarding claim 2, that nothing in the cited references discloses teaches or suggests, "determining information associated with an additional mortgage loan to be added to the portfolio".

6. Examiner respectfully disagrees and directs attention to Freeman, wherein “Each loan that has been accepted is added as another loan unit to a large portfolio of similar families of loans . . .”. (col 4 ln 62-65). Clearly, a loan that is added to a portfolio is an additional mortgage loan to be added to a portfolio.

7. Applicant further argues, regarding claim 2, that nothing in the cited references discloses teaches or suggests, “a category size ”expressed as a percentage of a total loan”.”.

8. Examiner respectfully disagrees and directs attention to Freeman, wherein loan performance is affected by various factors, each of which is a category, e.g. “19 performance history or age of the loan, 20 remaining time to maturity, 21 loan amount, 22 interest rate, 23 borrower's credit worthiness, 24 geographic locations, and 25 underlying collateral type.” (Col 8 ln 1-8). Official notice is taken that any database may be searched and categorized according to any of the factors used for analysis, including, in this case, credit rating or credit worthiness. Further, the size of a category can be expressed in any manner, including a percentage of a total loan.

Applicant makes parallel arguments with respect to independent claims 21 and 24, to which the response is made.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 2-10 and 17-19 are rejected under 35 U.S.C. 101 because the claims are directed to an abstract idea, and thus do not require any physical transformation and the invention as claimed does not produce a useful, concrete, and tangible result.

11. As above, the cited limitation is almost an afterthought, and merely a nominal or ancillary recitation of technology. Thus, it is analogous to a preamble which would only state a purpose or intended use for the invention and where the claim is otherwise structurally complete. (*e.g.*, *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 51 USPQ2d 1161 (Fed. Cir. 1999), *Catalina Marketing International Inc. v. Coolsavings.com Inc.*, 62 USPQ2d 1781 (Fed. Cir. 2002).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2-10, 15, 17-19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al (US 6,249,775) in view of Wheatworks – (Version History: LoanSpread Financial Calculator, at <http://www.wheatworks.com/versionhistorylscp.htm>).

14. Regarding claim 2 –

15. Freeman discloses a method to facilitate analysis of a commercial mortgage backed security portfolio associated with a plurality of mortgage loans (e.g. col 1 ln 5-10), comprising:

determining base information associated with the portfolio (e.g. col 3 ln 10-21);

determining information associated with an additional mortgage loan to be added to the portfolio (col 15 ln 35-43);

wherein the portfolio is associated with a plurality of credit rating categories, each credit rating category being associated with a current category size, and wherein said calculating includes: determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan (col 14 ln 16-21);

wherein said steps are performed by a computer.

16. Note that, as above, “Each loan that has been accepted is added as another loan unit to a large portfolio of similar families of loans . . .”. (col 4 ln 62-65). Clearly, a loan that is added to a portfolio is an additional mortgage loan to be added to a portfolio.

17. Further note, as above, that in Freeman, wherein loan performance is affected by various factors, each of which is a category, e.g. “19 performance history or age of the loan, 20 remaining time to maturity, 21 loan amount, 22 interest rate, 23 borrower’s credit worthiness, 24 geographic locations, and 25 underlying collateral type.” (Col 8 ln 1-8). Official notice is taken that any database may be searched and categorized according to any of the factors used for analysis, including, in this case, credit rating or

credit worthiness. Further, the size of a category can be expressed in any manner, including a percentage of a total loan.

18. Freeman does not disclose calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio. However, loan spread calculators are old and well-known as evidences by, e.g. Wheatworks). It would be obvious to one of ordinary skill in the art to include loan spread calculation in analyzing a portfolio of mortgages, given that loan spread calculation is a standard for evaluating mortgages.

19. Regarding claim 3 –

20. Freeman discloses the method of claim 2, wherein the determination of category sizes for the additional mortgage loan is based on at least one of: (i) a property type, (ii) a risk value, (iii) debt service coverage ratio information, or (iv) loan to value information. (e.g. col 13 ln 49-59).

21. Regarding claim 4 –

22. Freeman discloses the method of claim 2, further comprising: adding the category size for the additional mortgage loan to the current category size to determine a combined category size for each credit rating category. (e.g. col 13 ln 11-23).

23. Regarding claim 5 –

24. Freeman disclose the method of claim 4, further comprising: determining an original profitability of the portfolio; calculating a combined profitability of the portfolio and the additional mortgage loan based on the combined category sizes; and

subtracting the original profitability from the combined profitability to determine a profitability of the additional mortgage loan. (e.g. col 13 ln 60-65).

25. Regarding claim 6 –

26. Freeman discloses the method of claim 2, wherein the information associated with the additional mortgage loan includes a desired profitability of the additional mortgage loan. (e.g. col 13 ln 60-65).

27. Regarding claim 7 –

28. Freeman discloses the method of claim 6, wherein said calculation of the loan spread is an iterative process. (e.g. col 16 ln 36-45).

29. Regarding claim 8 –

30. Freeman discloses the method of claim 7, wherein the iterative process includes: wherein said computing and adjusting are repeated until the resulting profitability is within a predetermined range of the desired profitability. (e.g. col 13 ln 49-59, col 12 ln 59 – col 13 ln 4).

31. As above, Freeman does not disclose calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio. However, loan spread calculators are old and well-known as evidences by, e.g. Wheatworks). It would be obvious to one of ordinary skill in the art to include loan spread calculation in analyzing a portfolio of mortgages, given that loan spread calculation is a standard for evaluating mortgages.

32. Regarding claim 9 –

33. Freeman discloses the method of claim 8, wherein said adjusting is based on duration of the additional mortgage loan. (col 4 ln 61-col 5 ln 5, col 12 ln 59 – col 13 ln 4).

34. Regarding claim 10 –

35. Freeman discloses the method of claim 9, wherein said adjusting comprises: determining an original duration of the portfolio; calculating a combined duration of the portfolio and the additional mortgage loan; and subtracting the original duration from the combined duration to determine the duration of the additional mortgage loan. (col 4 ln 61-col 5 ln 5).

36. Regarding claim 15 –

37. Freeman discloses the method of claim 2, wherein said calculating is performed via a substantially real-time pricing application. (col 18 ln 45-55)

38. Regarding claim 17 –

39. Freeman discloses the method of claim 2, wherein the contribution of the additional mortgage is calculated via a method of subtraction process. (e.g. col 1 ln 1-5).

40. Regarding claim 18 –

41. Freeman discloses the method of claim 2, wherein the contribution of the additional mortgage loan is calculated via at least one of: (i) a weighted average contributed loan size, (ii) a duration, (iii) a Newton's method process, (iv) a Secant method process, or (v) a root finding method for a non-linear equation. (e.g. Table 2, Table 3).

42. Regarding claim 19 –

43. Freeman discloses the method of claim 2, further comprising: generating, based on said calculating, individual loan pricing outputs expressed as spread values in accordance with profitability targets. (e.g. col 15 ln 20-30).

44. Regarding claim 21 –

45. Freeman discloses an apparatus (e.g. fig 10), comprising:

a processor (fig 10, 124); and

a storage device in communication with said processor (fig 10, 122,120) and storing instructions adapted to be executed by said processor to: determine base information associated with a commercial mortgage backed security portfolio having a plurality of mortgage loans, determine information associated with an additional mortgage loan to be added to the portfolio (fig 10, 134, 150);

wherein the portfolio is associated with a plurality of credit rating categories, each credit rating category being associated with a current category size, and wherein said calculating includes: determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan (col 14 ln 16-21).

46. Note that, as above, “Each loan that has been accepted is added as another loan unit to a large portfolio of similar families of loans . . .”. (col 4 ln 62-65). Clearly, a loan that is added to a portfolio is an additional mortgage loan to be added to a portfolio.

47. Further note, as above, that in Freeman, wherein loan performance is affected by various factors, each of which is a category, e.g. “19 performance history or age of the loan, 20 remaining time to maturity, 21 loan amount, 22 interest rate, 23 borrower's

credit worthiness, 24 geographic locations, and 25 underlying collateral type.” (Col 8 In 1-8). Official notice is taken that any database may be searched and categorized according to any of the factors used for analysis, including, in this case, credit rating or credit worthiness. Further, the size of a category can be expressed in any manner, including a percentage of a total loan.

48. As above, Freeman does not disclose calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio. However, loan spread calculators are old and well-known as evidences by, e.g. Wheatworks). It would be obvious to one of ordinary skill in the art to include loan spread calculation in analyzing a portfolio of mortgages, given that loan spread calculation is a standard for evaluating mortgages.

49. Regarding claim 24 –

50. Freeman discloses a computer-readable medium storing instructions adapted to be executed by a processor to perform a method of facilitating analysis of a commercial mortgage backed security portfolio (e.g. col 1 In 5-10) associated with a plurality of mortgage loans (e.g. col 3 In 10-21) said method comprising: determining base information associated with the portfolio (e.g. col 14 In 35-45, col 3 In 5-25); determining information associated with an additional mortgage loan to be added to the portfolio (e.g. col 15 In 35-45); wherein the portfolio is associated with a plurality of credit rating categories, each credit rating category being associated with a current category size, and wherein said calculating includes: determining, for the additional mortgage loan, a

category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan (col 14 ln 16-21).

51. Note that, as above, "Each loan that has been accepted is added as another loan unit to a large portfolio of similar families of loans . . .". (col 4 ln 62-65). Clearly, a loan that is added to a portfolio is an additional mortgage loan to be added to a portfolio.

52. Further note, as above, that in Freeman, wherein loan performance is affected by various factors, each of which is a category, e.g. "19 performance history or age of the loan, 20 remaining time to maturity, 21 loan amount, 22 interest rate, 23 borrower's credit worthiness, 24 geographic locations, and 25 underlying collateral type." (Col 8 ln 1-8). Official notice is taken that any database may be searched and categorized according to any of the factors used for analysis, including, in this case, credit rating or credit worthiness. Further, the size of a category can be expressed in any manner, including a percentage of a total loan.

53. As above, Freeman does not disclose calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio. However, loan spread calculators are old and well-known as evidences by, e.g. Wheatworks). It would be obvious to one of ordinary skill in the art to include loan spread calculation in analyzing a portfolio of mortgages, given that loan spread calculation is a standard for evaluating mortgages.

54. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are

applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

55. We note the following definition:

Database “A file composed of records, each containing fields together with a set of operations for searching, sorting, recombining and other functions.” Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997.

56. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

57. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

58. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRISTINA OWEN SHERR whose telephone number is

(571)272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.


59. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt, II can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

60. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cristina Owen Sherr
Patent Examiner, AU 3621

/Calvin L Hewitt II/

Supervisory Patent Examiner, Art Unit 3685

Application Number 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	09/997,640	LEE, GEORGE H.	
	Examiner	Art Unit	
	CRISTINA OWEN SHERR	3685	